Claims

What is claimed is:

1. A method, comprising:

mapping, by an operating system, a range of virtual addresses to a range of physical addresses, wherein a subset of the range of virtual addresses is identity-mapped to a subset of the range of physical addresses.

2. The method of claim 1, wherein the subset of the range of virtual addresses comprises at least a portion of a page table.

3. The method of claim 1, wherein mapping further comprises:

selecting a start address of the subset of the range of physical addresses; and

selecting a size of the subset of the range of physical addresses.

4. The method of claim 1, wherein mapping further comprises:

selecting a number of pages to reserve as the subset of the range of physical addresses.

5. The method of claim 1, further comprising:

allocating the subset of the range of physical addresses for use by a direct memory access module.

6. The method of claim 5, further comprising:

re-allocating the subset of the range of physical addresses for use by the direct memory access module.

7. The method of claim 5, further comprising:

requesting an increase in a size of the subset of the range of physical addresses.

8. An article comprising a machine-accessible medium having associated data, wherein the data, when accessed, results in a machine performing:

mapping, by an operating system, a range of virtual addresses to a range of physical addresses, wherein a subset of the range of virtual addresses is identity-mapped to a subset of the range of physical addresses.

9. The article of claim 8, wherein the data, when accessed, results in the machine performing:

storing application data in the subset of the range of virtual addresses; and

passing a virtual address pointer associated with the subset of the range of virtual addresses to a direct memory access module.

10. The article of claim 8, wherein the data, when accessed, results in the machine performing:

determining a need to transfer application data using a direct memory access module; and

storing the application data in the subset of the range of physical addresses by writing the application data to the subset of the range of virtual addresses.

11. The article of claim 8, wherein the data, when accessed, results in the machine performing:

transferring application data between the subset of the range of virtual addresses and a peripheral device by passing a virtual pointer associated with the subset of the range of virtual addresses to a direct memory access module.

12. The article of claim 8, wherein the data, when accessed, results in the machine performing:

transferring the application data between the subset of the range of virtual addresses and a first-in first-out memory included in a peripheral device.

13. An apparatus, comprising:

a mapped memory having a range of physical addresses; and

a register associated with the mapped memory to indicate a subset of a range of virtual addresses that is identity-mapped to a subset of the range of physical addresses.

14. The apparatus of claim 13, further comprising:

a module to receive a pointer to the subset of the range of virtual addresses and to transfer data between the subset of the range of physical addresses and a peripheral memory using a direct memory access operation.

15. The apparatus of claim 14, wherein the peripheral memory comprises a first-in first-out memory.

16. The apparatus of claim 13, further comprising:

a processor associated with a memory map including at least one fixed address included in the range of physical addresses.

17. The apparatus of claim 13, further comprising:

a buffer allocated from the subset of the range of physical addresses.

18. A system, comprising:

a peripheral memory;

a mapped memory having a range of physical addresses;

a direct memory access module to be coupled to the peripheral memory and to the mapped memory, wherein a subset of a range of virtual addresses associated with the mapped memory is identity-mapped to the range of physical addresses; and

a display to be coupled to the peripheral memory.

19. The system of claim 18, wherein the peripheral memory comprises a graphics frame buffer.

20. The system of claim 18, further comprising:

an application module including a virtual pointer associated with the range of virtual addresses, wherein application data processed by the application module can be communicated between the range of virtual addresses and the peripheral memory by passing the virtual pointer to a direct memory access module.

21. The system of claim 18, wherein the direct memory access module is to transfer application data from the subset of the range of physical addresses to the peripheral memory in response to receiving a virtual pointer to the subset of the range of virtual addresses.